



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
841 Chestnut Building
Philadelphia, Pennsylvania 19107

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DEC 23 1991

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SUBJECT: Determination of a Threat to Public Health
or Welfare or the Environment
Penn-DOT Route 19 Site

FROM: *for* Marjorie Easton, On-Scene Coordinator *Charles Kleeman*
Western Response Section (3HW32)

TO: Thomas C. Voltaggio, Director
Hazardous Waste Management Division (3HW00)

THRU: Charles Kleeman, Chief *Charles Kleeman*
Western Response Division (3HW32)

1. **Site Name and Location:** Penn-DOT Route 19 Site
Summit Township
Erie County, Pennsylvania
2. **Owner/Operator:** Pennsylvania Department of
Transportation/David DeLosa
3. **Population Information:** 814 people within a one-mile radius
4. **Access:** Unrestricted access via rural roads and adjacent
property
5. **Coordination with other Authorities:**

State (PADER): Mark Gorman
Meadville Office

County: Mark Fedorchak
Erie County Department of Health
6. **Site Background and Characteristics:**

The Penn-DOT Route 19 Site is an active State-owned highway maintenance facility for the Pennsylvania Department of Transportation. The facility is used to store and maintain heavy equipment and highway maintenance supplies. The facility has a history of poor housekeeping practices. The major concerns at this site include lead, chromium, and solvent-contaminated soil and volatile organics in potable well water.

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degrade the water quality. Thus, monitoring of the surface water should be included in the proposed action.

4. As mentioned above, the health threat from surface soil contamination is sufficiently addressed by imposing restrictions on the site, however, the data from the paint storage area shows a hot spot which should be removed to prevent incidental contact of onsite personnel. In addition, possible contamination in the subsurface has not been investigated.

If you need further assistance with this site, please let me know.

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The Penn-DOT Route 19 Site consists of approximately 27 acres in a wooded and residential area. The site is bordered on the north by LeBoeuf Creek, a perennial creek that is stocked with trout. North of LeBoeuf Creek, along Townhall Road, lies a residential area. The site is bordered on the east and south by wooded areas. Immediately west of the site is U.S. Route 19. Mixed fields and woodland lie directly west of U.S. Route 19. The site surface slopes slightly towards LeBoeuf Creek, and four small intermittent streams running through the site feed LeBoeuf Creek. ORIGINAL
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More than 30 residences lie within a quarter-mile radius of the site, and over 100 residences lie within a half-mile radius. The nearest house is the Hinkler residence at 1761 West Townhall Road, approximately 300 feet from the site. The Environmental Protection Agency (EPA) Region III Field Investigation Team (FIT) estimated in 1989 that approximately 814 residents live between 0-to 1 mile of the site. Approximately 1,422 people live in a 1-to 2-mile radius of the site, and approximately 3,552 people live within 2 and 3 miles of the site. FIT estimated that approximately 5,888 people live within a 3-mile radius of the site. All residences are on private well systems for potable water supplies. An elementary school lies approximately 2400 feet east of the site, along Townhall Road, and access to the site is unrestricted.

7. Hazardous Substances Present:

During the FIT site investigation of the site on March 7, 1989, drum, soil, ground water, surface water, aqueous, and sediment samples were collected. The following is a list of contaminants found onsite.

- a. The analysis of the drum samples revealed elevated ethylbenzene (170 mg/kg), the Registry of Toxic Effects of Chemical Substances (RTECS) gives a Toxic Concentration Low (TCLo of 100/mg/kg. Lead (1,470 mg/kg) was detected as a source for onsite contamination and arsenic (980.8 mg/kg) which is a known carcinogen.
- b. Onsite soil in the drum storage area revealed elevated levels of lead (1,470 mg/kg) which is well above the action level for cleanup and cadmium (2,200 mg/kg) which according to the RTECS has a Toxic Dose Low (TDLo) in rats at 8 mg/kg.
- c. No significant contamination was revealed in the ground water sampling.

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- d. The lagoon surface water sample revealed elevated levels of lead (0.137 mg/l) which is well above the Maximum Contamination Level (MCL) of the U.S. EPA drinking water standards.
- e. Aqueous analytical results for metals, volatile organics, and polyaromatic hydrocarbons from LeBoeuf Creek showed low levels of contaminants. The results were insignificant as a threat to human health, welfare, and the environment.
- f. Sediment samples from LeBoeuf Creek revealed levels of lead (280 mg/kg) which is bioaccumulative.

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On September 19, 1990, EPA performed a removal assessment of the site. The analytical data for the assessment shows lead contamination in one of the soil samples at concentrations of 722 mg/kg (parts per million) which is above the 500 mg/kg action level for cleanup.

The substances present onsite are considered to be hazardous substances pursuant to Section 101(14) of CERCLA.

8. **Threats to Public Health or Welfare or the Environment (references are to the National Contingency Plan (NCP) 40 CFR, Part 300):**

300.415 (b)(2)(i) "Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants"

Access to surface soil contamination at the site is unrestricted. Airborne contaminated soil particles in unvegetated areas of the site may pose a direct contact, inhalation, and ingestion threat to persons entering the site.

300.415 (b)(2)(ii) "Actual or potential contamination of drinking water supplies or sensitive ecosystems"

Although sampling results for a potable water supply onsite showed minimal contamination of drinking water, the potential exists for contamination of residential wells surrounding the site.

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300.415 (b)(2)(iii)

"Hazardous substances or pollutants or contaminants in drums, barrels, tanks or other bulk storage containers, that may pose a threat of release"

Drum storage areas onsite were inspected during the September 1990 assessment and again in August 1991 during a windshield assessment. Both inspections showed leaking and uncovered drums. Sampling of the drums onsite during the September 1990 assessment indicated that the drums contain lead, toluene, and other ignitable solvents that may pose a threat of release due to the lack of proper storage and containment.

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300.415 (b)(2)(iv)

"High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate"

Elevated levels of lead, chromium, methylene chloride, and other contaminants present in the soils onsite present a probable migration of contaminants offsite by means of ground water and surface water runoff.

300.415 (b)(2)(v)

"Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released"

Contamination has already migrated into LeBoeuf Creek. Runoff from local precipitation may cause the contaminants present onsite to continue to migrate into LeBoeuf Creek and surface impoundments.

300.415 (b)(2)(vii)

"The availability of other appropriate Federal or State response mechanisms to respond to the release"

The Pennsylvania Department of Environmental Resources does not possess the resources to undertake a removal of this magnitude at this time and has asked EPA to assess the site and take appropriate action.

9. List of Supporting Documents:

- a. POLREP's #1-6 - Penn-DOT Route 19 Site Prepared by Dave Wright, Senior OSC

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- b. POLREP #7 - Penn-DOT Route 19 Site Prepared by Marjorie Easton, OSC
- c. Photographic documentation of Penn-DOT Route 19 Site Prepared by EPA/TAT, Roy F. Weston, Inc., for Dave Wright, Senior OSC
- d. Analytical results from sampling assessment prepared by EPA/TAT, Roy F. Weston, Inc., and SSM/Laboratories for Dave Wright, Senior OSC
- e. ATSDR Package prepared by EPA/TAT, Roy F. Weston, Inc., for Dave Wright, Senior OSC
- f. Memorandum of Health Consultation from ATSDR to Charles Walters, ATSDR Regional Representative
- g. FIT Report prepared by NUS Corporation for U.S. EPA RPM Gregory Ham

10. Recommendation:

Because conditions at the Penn-DOT Route 19 Site meet the NCP criteria for a removal action, as indicated above, I have determined that a threat to the public health or welfare or the environment exists at the site, and a Removal Action is warranted. I, therefore, recommend that the site be found to pose an imminent and substantial endangerment to public health, welfare, and the environment.

11. Action by the Approving Official:

I have reviewed the above-stated facts and based upon these facts and the information compiled in the document described above, I hereby determine that the release or threatened release of hazardous substances and/or from the site presents an imminent and substantial endangerment to public health, welfare, and the environment.



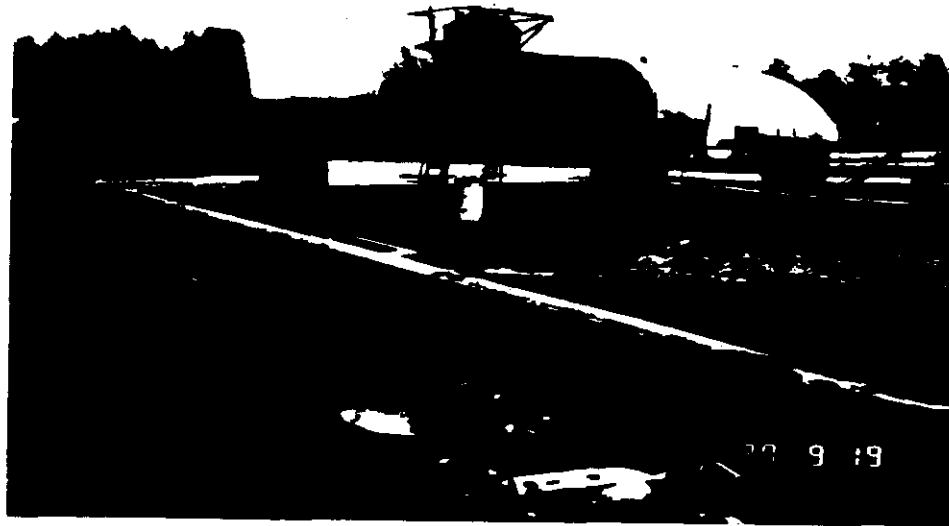
Thomas C. Voltaggio, Director
Hazardous Waste Management Division

12/30/91

Date

Attachments: Photographic Documentation

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Penn-DOT Route 19 Site
Summit Township, Erie County, PA
Photo Taken: 9/19/90

Remarks: Photo shows road oil storage container located onsite which contains road oil for road paving. Evidence of numerous spills can be seen on the outside of the storage tank and its support stand. Previous contaminated soil has been removed and contained on a liner and bermed storage area. As of 8/09/91, evidence of reoccurring spills still exist both within the spill containment barrier and the outside loading area.

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Penn-DOT Route 19 Site
Summit Township, Erie County, PA
Photo Taken: 9/19/90

Remarks: Photo shows TAT sampling a drum storage area located onsite, other drum storage exist onsite that is far more extensive then seen in this photo. Evidence of numerous spills can be seen in this area and other drum storage areas onsite. As of 8/09/91, evidence of reoccurring spills still exist onsite.

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